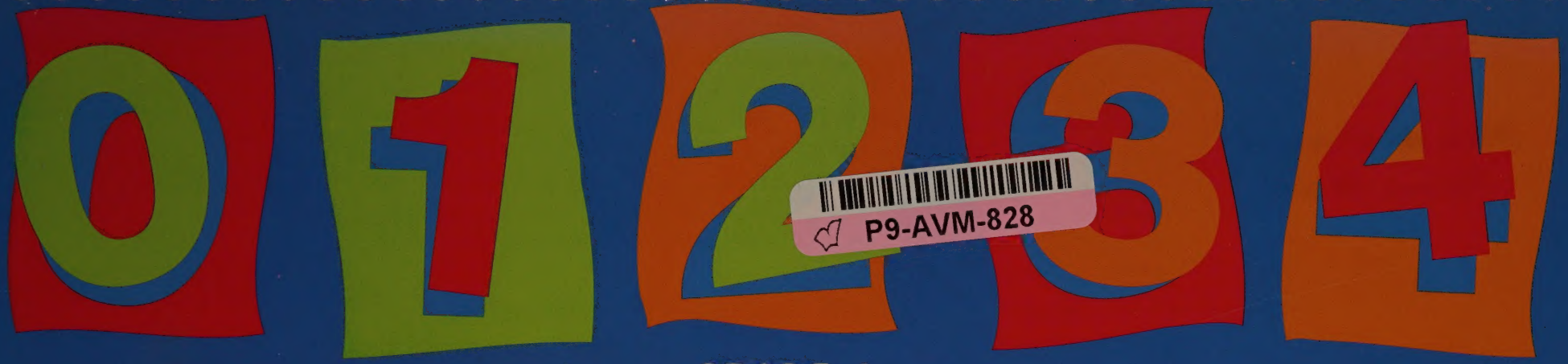

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GRADE 4

PROBLEM OF THE DAY

FLIP CHART

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Math in my World

Mc Graw Hill

From the library of:
Chenoa Beard

The **PROBLEM OF THE DAY FLIP CHART** provides additional problem-solving activities for most lessons in McGraw-Hill School Division **MATH IN MY WORLD.** The activities give students the opportunity to develop their abilities to use logical reasoning and to apply problem-solving strategies to a variety of interesting everyday situations.

The **PROBLEM OF THE DAY FLIP CHART** can be used to begin or end a lesson and help students sharpen problem-solving skills. The problems may be displayed in a learning center environment, posted on a bulletin board, or written on the chalkboard.

The **PROBLEM OF THE DAY FLIP CHART** activities along with answers are reproduced in McGraw-Hill School Division **MATH IN MY WORLD** Teacher's Edition.

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Problem of the Day • 1

Maria ran a lap around the school in 3 minutes and 27 seconds. It took Keith 220 seconds to run the same distance. Who completed the lap in the least amount of time? How do you know?

Problem of the Day • 2

In Georgia´s class, 5 students have red hair, 15 students have brown hair, 2 students have black hair, and 7 students have blond hair. How many students do not have brown hair?

Problem of the Day • 3

Karen makes and sells hair bows to her friends. Yesterday, Karen sold two hair bows for $2 each. She sold a number of larger hair bows for $3. Karen collected a total of $13. How many large hair bows did she sell?

Problem of the Day • 4

Ken has one shirt and one pair of shorts in each of these colors: red, yellow, blue. What different combinations of clothes does he have?

Problem of the Day • 5

Five hundred sixty-seven students at Paro Elementary School are wearing red clothing. Of those students, 316 have red stripes, and 27 have red dots on their clothing. No student has both red dots and red stripes. How many students wearing red are not wearing dots or stripes?

Problem of the Day • 6

The school library charges an overdue book 15¢ for the first day, then 10¢ for every additional day. George paid a fine of 95¢ for one overdue book. How many days was his book overdue?

Problem of the Day • 7

The numbers listed below all have something in common. What is it? Name a 1-digit number that would fit in the group: 16, 34, 511, 124, 610, 412, 700.

Problem of the Day • 8

On a recent test, Julio missed one problem because he added 5 when he was supposed to subtract 5. The answer he gave was 17. What was the correct answer?

Problem of the Day • 9

Write all the whole numbers that would give a total less than 15.

____ + 6 + 3

Problem of the Day • 10

Julio has $1.50 in quarters and nickels. He has the same number of quarters and nickels. How many coins does Julio have?

Problem of the Day • 11

Peter is setting up cones as borders along a race track. The track is 24 yards long. One cone is placed on either side at the start, and then every 8 feet. How many cones will Peter need?

Problem of the Day • 12

Georgia has two 10¢-stamps, two 5¢-stamps, and ten 1¢-stamps. How many different ways can she make 32¢?

Problem of the Day • 13

Dulcie and Marcus collect marbles. They have the same number of striped marbles. Dulcie has 15 solid marbles. Marcus has 26 solid marbles. Altogether they have 87 marbles. How many striped marbles does each one have?

Problem of the Day • 14

The distance from Peg's house to school is 4 miles. The distance from Juanita's house to Peg's house is half the distance from Peg's house to school. How far does Juanita travel to go to school if she stops at Peg's house on her way?

Problem of the Day • 15

The postage rate for first class mail is $0.32 for the first ounce and $0.23 for each additional ounce. What is the cost of mailing a letter that weighs 6 ounces?

Problem of the Day • 16

Morgan can peel 20 apples in one hour. Ted can peel 15 apples in one hour. How many apples can Morgan and Ted peel in four hours?

Problem of the Day • 17

Karyn and some friends got on the school bus at its first stop. At each of the next two stops 3 students got on the bus. There were then 11 students on the bus. How many friends got on the bus with Karyn?

Problem of the Day • 18

George rides his bicycle 30 miles each day. Ned rides his bicycle 25 miles each day. How many more days will it take Ned to bicycle 300 miles than George?

Problem of the Day • 19

Jane and Ben counted the number of students on two lunch lines. Ben counted 67 more students in his line than Jane counted in her line. They counted 245 students all together. How many students did Jane count?

Problem of the Day • 20

Zach got on the elevator on the first floor. The elevator went up three floors where 5 people got on and 2 got off. One person got on at each of the next three floors. After going up 5 more floors, Zac got off. What floor is Zac on?

Problem of the Day • 21

Julio scored a total of 25 points in yesterday's basketball game. Julio scored three 1-point free throws and scored two baskets from the 3-point zone. How many 2-point baskets did Julio score?

Problem of the Day • 22

In the United States, national elections are always held on the first Tuesday following the first Monday in November. Name the possible dates an election could be held.

Problem of the Day • 23

A digital clock displays the time as 7:56. What time will it be after 18 digit changes?

Problem of the Day • 24

Mina started reading a new book. On Monday and Tuesday she read 118 pages each day. On Wednesday she read twice as many pages as on Tuesday. On Thursday she read 104 pages and finished the book. How many pages were in the book?

Problem of the Day • 25

A pictograph in a newsletter shows that 28 students like to read mysteries. The key for the pictograph is ❑ = 8 students. How many ❑ are shown to represent 28 students?

Problem of the Day • 26

Ted sells four different flavors of ice cream—chocolate, vanilla, chocolate chip, and strawberry—and four different toppings—sprinkles, nuts, strawberries, and chocolate chips. How many different combinations of ice cream and toppings are possible?

Problem of the Day • 27

Kelli has her books organized on five shelves, each shelf containing books on only one topic. The books about animals are on the shelf directly below the books about crafts. The books about sports are on a shelf above the books about the planets. The shelf that holds craft books is three shelves below the shelf that holds mystery books. What type of books are on the third shelf?

Problem of the Day • 28

Kera has $4.00 to buy several 23¢ and 32¢ stamps. She wants at least five 23¢ stamps. She wants to use the rest of her money for 32¢ stamps, but will buy another 23¢ stamp if she has money left over. How many 23¢ and 32¢ stamps will Kera buy?

Problem of the Day • 29

Tim and Sarah are saving money to buy the same CD. Tim has to save $22 more and Sarah needs to save $3 more. If they combine their savings, they need $1 more to buy one copy of the CD. What is the cost of the CD?

Problem of the Day • 30

Penny's pet hamster had eight babies. How many possible combinations of male and female hamsters are there?

Problem of the Day • 31

Pat earned $15 baby-sitting 4 hours on Friday night. She earned $3 per hour plus $1 per child. How many children did Pat baby-sit?

Problem of the Day • 32

Kevin took a survey. He asked his friends how many hours each week they spent studying. The data he collected is shown below. Find the median, range, and mode of these data:
2, 7, 3, 6, 1, 5, 2, 7, 3, 9, 10, 5, 4, 7, 8, 4, 7.

Problem of the Day • 33

Morgan ran around the school track in 89 sec. Taylor ran around in 1 min 32 sec. Who completed the lap faster? by how much?

Problem of the Day • 34

Which number makes the most sense? Use the numbers below to complete the paragraph.

The Empire State Building is ____ ft tall. Over ____ million people visit the building each year. Some climb the ____ steps to the top.

1,238 1,860 2

Problem of the Day • 35

Donna's relay team won a relay race. Each member's time is shown below. How long did it take for the team to complete the race?

Donna: 1 min 20 sec

Kara: 1 min 25 sec

Martin: 1 min 41 sec

Becca: 1 min 16 sec

Problem of the Day • 36

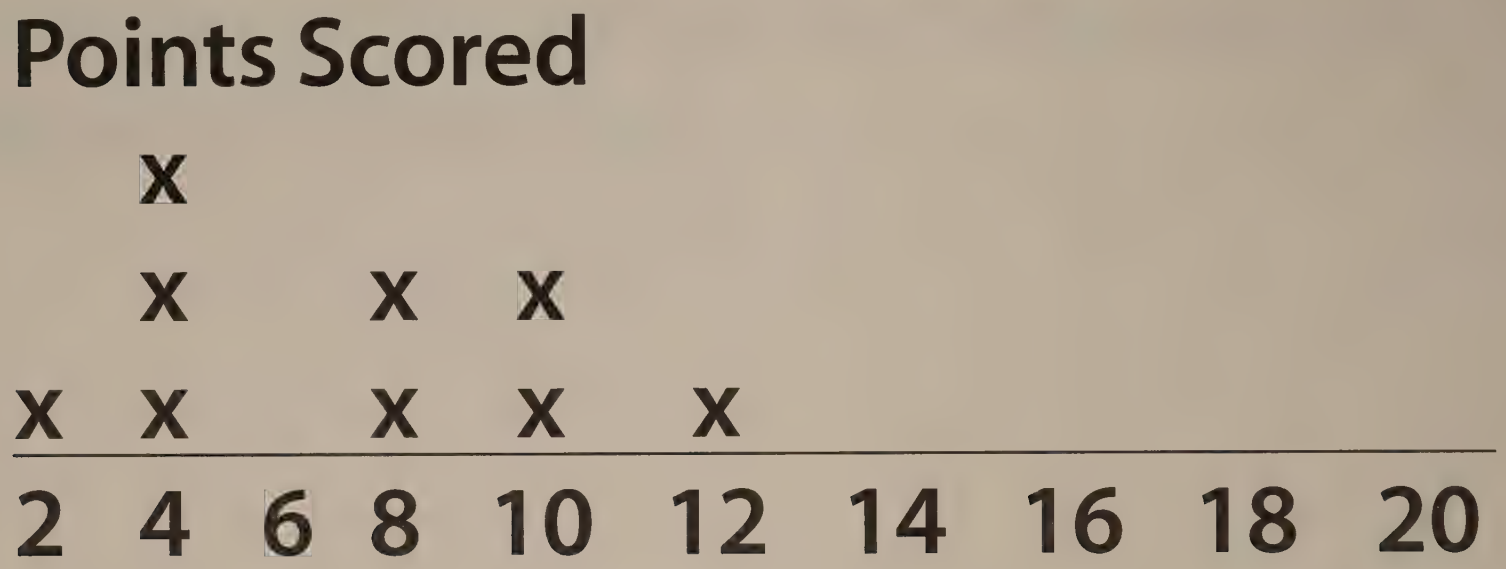
Michael bought three pairs of shorts for $30, two T-shirts for $18, and a hat for $17. How much will it cost Ken to buy one pair of shorts and 3 T-shirts?

Problem of the Day • 37

The product of two numbers is 24; their sum is 10. What are the two numbers?

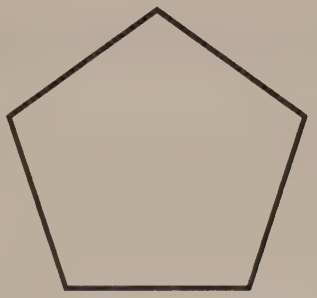
Problem of the Day • 38

Of the median, mode, and range of this data, which is the greatest?



Problem of the Day • 39

Draw all possible lines connecting two corners. How many lines can you draw?



Problem of the Day • 40

When December 6th is on a Friday, on what day of the week was the previous November 13th?

Problem of the Day • 41

Sally has 1 black shirt, 1 white shirt, 1 black skirt, 1 white skirt, and 1 gray skirt. How many different combinations of shirt and skirt can she make?

Problem of the Day • 42

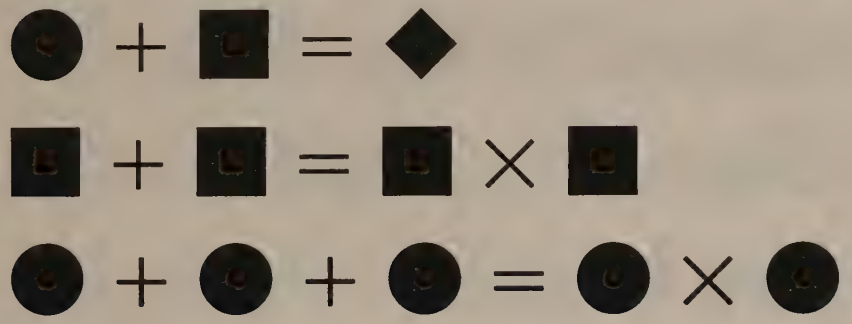
Warren and Kim have after-school jobs. Warren works 2 hours a day and Kim works 3 hours a day. Last year Warren worked 100 days and Kim worked 80 days. Who worked the greater number of hours? How do you know?

Problem of the Day • 43

Zack wants to buy a CD for $13.85, a magazine for $1.75, and a cassette tape on sale for $2.50. He has $20. Does he have enough money? How do you know?

Problem of the Day • 44

Find the values of ●, ■, and ◆.



Problem of the Day • 45

Jill is stacking boxes of skates for a display. She places 35 boxes on the bottom, 30 boxes on the second row, and 25 boxes on the third row. If she follows the same pattern for the rest of the stack, how many rows are in the finished stack? How many boxes are there in all?

Problem of the Day • 46

On January 1, Brandon was asked, "How old are you?" He answered "The day before yesterday, I was 9. Next year, I'll be 12." Explain how this can be true.

Problem of the Day • 47

Find the products: 9×11, 9×22, 9×33, and 9×44. Then use patterns to find 9×55 and 9×66. Tell which patterns you used.

Problem of the Day • 48

You have 30¢. You have 6 coins. What coins do you have?

Problem of the Day • 49

Gail colors 4 squares red and 3 squares yellow. She colors 32 copies of this design in all. How many squares does she color altogether? How do you know?

Problem of the Day • 50

Lee entered a number in a calculator, divided by 8, and the result was 516 with a remainder of 3. Lee has forgotten the first number he entered. What can Lee do to calculate the number? What was the number?

Problem of the Day • 51

The houses on Pat's side of the street are all even numbers. The first house on the street is numbered 100 and the last one is numbered 400. Pat noticed that no even number is skipped. How many houses are there on one side of the street?

Problem of the Day • 52

In an average day, 20,000 people write letters to the President of the United States. In 30 days should the President receive about a million letters, about a half million letters, or about 250,000 letters?

Problem of the Day • 53

Katie is twice as old as her little sister, Penny. In 5 years Katie will be 3 times as old as her sister is today. How old are Katie and Penny?

Problem of the Day • 54

At Lickity Split Ice Cream, customers have a choice of 5 different flavors and 4 toppings. How many different choices of 1 flavor and 1 topping do you have?

Problem of the Day • 55

Warren is saving money to buy a bicycle that costs $250. Warren saved $1 the first week, $2 the second week, $4 the third week, and $8 the fourth week. If he continues to save following the same pattern, how many weeks will it take Warren to save enough money to buy the bicycle?

Problem of the Day • 56

Consuela has a gymnastic class right after school that lasts 2 hours. On Tuesdays, she also has a club meeting right after gymnastics. Consuela's mother picks her up from the club meeting at 6:30. If Consuela got out of school at 3:00, how long was the club meeting?

Problem of the Day • 57

Find a 3-digit number using the following clues:

—the sum of all three digits is 12;

—the sum of the ones digit and hundreds digit equals the tens digit;

—the tens digit is one greater than the ones digit.

Problem of the Day • 58

If sixteen players enter a ping-pong tournament, how many rounds of ping-pong would have to be played to determine the winner?

Problem of the Day • 59

A photograph is 5 inches wide and 7 inches long. It has a 2-inch-wide frame around it. How wide and long is the picture with the frame?

Problem of the Day • 60

Sue has a red pair of shorts and a blue pair of shorts. She has a white shirt, a yellow shirt, and a purple shirt. How many outfits can she make?

Problem of the Day • 61

You have four coins. They are worth 36¢. What coins do you have?

Problem of the Day • 62

You have 4 one-cup, 3 pint, and 1 quart containers. How can you store a half-gallon of lemonade you make in these containers?

Problem of the Day • 63

Starting on Monday, you deliver newspapers to 20 customers per day during your first week. You gain 2 more customers each day starting Monday of the second week. How many newspapers have you delivered by the end of the second Thursday?

Problem of the Day • 64

Ryan bought 1 gallon of spring water. He drank 6 cups. How many pints of spring water did he have left?

Problem of the Day • 65

Tania's ruler is 10 cm long. She uses it to measure a 3 m long piece of string. How many times must she place the ruler along the string?

Problem of the Day • 66

Mr. Kim has 640 pencils and 720 pens. Eight boxes of pencils contain the same number of pencils and nine boxes of pens contain the same number of pens. How does the number of pencils in each box compare to the number of pens?

Problem of the Day • 67

Kyle has $2,592 to pay for 4 truckloads of vegetables. Each truckload costs the same amount. What two sets of compatible numbers can you use to estimate the quotient? How does the exact answer compare to these estimates?

Problem of the Day • 68

Juan collects baseball cards. He puts the cards in separate pockets on plastic pages. Each page has 4 rows and each row holds 2 cards. How many pages does Juan need for 96 baseball cards?

Problem of the Day • 69

Kim went to Water World Park with her family for a family reunion. Admission to the park cost a total of $172. There were 8 children and 9 adults. A child's admission cost $8.00. How much was the adult admission?

Problem of the Day • 70

Mr. Auguste makes 3 models in an hour. He works on the models 2 hours each day. How many days did Mr. Auguste work to make 720 models?

Problem of the Day • 71

Every seat in Torch Stadium was filled for each of 6 gymnastics demonstrations. If 19,290 tickets were sold, how many people attended each demonstration?

Problem of the Day • 72

At the Summer River Festival, 126 people rented canoes and kayaks. Twice as many people rented canoes as kayaks. How many people rented canoes? Kayaks?

Problem of the Day • 73

There are 5 classes at the sports center. There are 8 students in the first class and a total of 27 students in classes 2–4. The last class has 2 more students than the first. What is the average number of students in each class?

Problem of the Day • 74

Students at Lincoln School print 2,600 flyers. They print 500 more flyers than each class will have to distribute outside of school. How many flyers will each class have if there are 30 classes at their school and each class receives the same number of flyers?

Problem of the Day • 75

There are 144 cartons of juice in the cafeteria.
There are 36 cartons of each kind of juice.
How many kinds of juice are there?

Problem of the Day • 76

Each flower arrangement takes up at least 16 inches on a display table. How many flower arrangements can be displayed on a table that is 108 inches long?

Problem of the Day • 77

The product of three numbers is 1. The sum of these numbers is 3. What are the three numbers?

Problem of the Day • 78

Tabitha earned $3.50 per hour helping Mrs. Longo with yard work. Tabitha worked four weeks for the following number of hours: 15 h, 8 h, 10 h, and 5 h. Make a line graph showing how much she earned each week.

Problem of the Day • 79

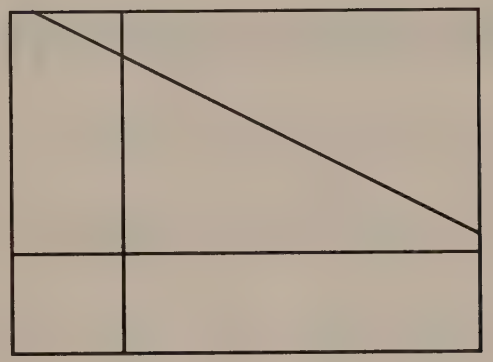
The fourth-grade class of Holman Middle School is going on a field trip. Each student may bring up to two guests. Fifty-nine students signed up for the trip. What are the least and greatest number of buses they will need if one bus holds 60 people?

Problem of the Day • 80

Wylan used 4 carnival tickets on food, 8 tickets on rides, and 6 tickets on games. If each ticket cost $0.75, how much money did Wylan spend?

Problem of the Day • 81

Tell how many angles there are in the diagram shown.



Problem of the Day • 82

Fill this square with the numbers 0 to 8 so that the sum in each row, column, and diagonal is 12. Use each number just once.

Problem of the Day • 83

Use the clues to find the name of the teacher in Room 220.

Room 218	Room 220	Room 222	Room 224

- Mr. Yen's room is number 224.
- Ms. O'Brien's room is next to Mr. Yen's room.
- Mr. Wilson's room is not to the right of Mr. Chen's room.

Problem of the Day • 84

Gwen made a pictograph that shows the number of students who like different flavors of ice cream. Each ice cream cone represents 8 students. How many ice cream cones should Gwen draw to represent 20 students.

Problem of the Day • 85

Carrie is making a picture frame for a print that measures 36 inches long and 18 inches wide. The frame is $2\frac{1}{2}$ inches wide. What will the dimensions of the picture with frame be when completed?

Problem of the Day • 86

Ben, Maggie, and Kurt collect marbles. Ben has 5 more marbles than Maggie. Kurt has 8 less marbles than Ben. Maggie has 38 marbles. How many marbles do Ben and Kurt have?

Problem of the Day • 87

Austin lives 5 miles from school, 2 miles from the library, and 4 miles from the airport. He is drawing a map where one inch represents a half mile. On the map, how far should his house be from the airport? Sketch the map using inch graph paper.

Problem of the Day • 88

The Samson family is having pizza for dinner. The pizza has 8 equal slices. Two slices have pepperoni and three slices have pepperoni and mushrooms. The rest of the pizza is cheese. What fraction of the pizza is only cheese?

Problem of the Day • 89

John and Karen are playing a card game. John is holding 8 cards. There are two kings, two queens, and one jack in his hand. What fraction of John's cards are kings, queens, or jacks?

Problem of the Day • 90

Martha and Donna are playing jacks. Each girl has 10 jacks. Martha picks up $\frac{2}{5}$ of her jacks and Donna picks up $\frac{1}{2}$ of her jacks. Who picks up more jacks? Explain.

Problem of the Day • 91

Erica painted $\frac{2}{3}$ of her poster while Renee painted $\frac{5}{12}$ of her poster. Janet painted $\frac{1}{2}$ of her poster and Teresa painted $\frac{4}{6}$ of her poster. Which girls painted the same amount of their posters?

Problem of the Day • 92

Clark has 36 geograph cards. Nine of the cards are about South American countries. What fraction of the cards are about South American countries?

Problem of the Day • 93

Sean, Darla, and Jose each have 36 marbles. Half of Sean's marbles are blue while $\frac{5}{12}$ of Darla's marbles are blue and $\frac{3}{4}$ of Jose's marbles are blue. Who has the most blue marbles? the least?

Problem of the Day • 94

Carol has $3\frac{3}{4}$ feet of ribbon. John has $3\frac{5}{8}$ feet of ribbon. Do they have the same amount of ribbon? Explain.

Problem of the Day • 95

Lyle has a 6-sided number cube with the numbers 1, 2, 3, 2, 4, 2. One number is on each side of the cube. Find the likelihood of Lyle rolling a 2, a 1, and a 5. Explain.

Problem of the Day • 96

Maria has 6 red beads, 4 yellow beads, and 2 blue beads in a bag. If she picks one bead without looking, what is the probability that she picks a yellow or a blue bead? not a blue bead?

Problem of the Day • 97

There are 2 red cubes, 1 blue cube, and 1 yellow cube in a paper bag. Which color is most likely to be selected in 20 draws if the cube is drawn without looking and returned to the bag after each draw? Conduct an experiment to find out.

Problem of the Day • 98

Jenny tosses a 1–6 number cube 60 times. How many times do you predict she will toss a 1 or a 2? an odd number?

Problem of the Day • 99

Jenny, Susan, Rosa, and Megan sat together for lunch on the same side of a picnic table. Jenny sat between Rosa and Susan. Rosa sat between Megan and Jenny. Which of the two girls sat on the ends?

Problem of the Day • 100

A pizza is divided into 8 equal slices. Betty and Bryan each eat $\frac{3}{8}$ of the pizza. What number sentence shows how much pizza they ate all together? What fraction of the pizza, in simplest form, did they eat?

Problem of the Day • 101

Lucy's plant grew $\frac{1}{16}$ inch the first week, $\frac{3}{16}$ inch the second week, and $\frac{5}{16}$ inch the third week. How much did the plant grow in 3 weeks? Did it grow more or less than $\frac{1}{2}$ inch?

Problem of the Day • 102

Clark has $\frac{7}{8}$ yard of blue ribbon and $\frac{3}{8}$ yard of red ribbon. How much more blue ribbon than red ribbon does Clark have?

Problem of the Day • 103

Jeff has $\frac{5}{8}$ yard of twine and $\frac{5}{6}$ yard of string. He uses $\frac{3}{8}$ yard of twine and $\frac{3}{6}$ yard of string. How much twine is left? string? Is there more twine or string left?

Problem of the Day • 104

One piece of wood measures $\frac{5}{6}$ yard, another piece measures $\frac{2}{3}$ yard, and the last piece measures $\frac{3}{4}$ yard. What equivalent fractions can you write with a common denominator for the fractions?

Problem of the Day • 105

A serving of chicken noodle soup is $\frac{3}{4}$ cup at the cafeteria while a serving of tomato soup is $\frac{5}{8}$ cup. Which serving of soup is more? How much more?

Problem of the Day • 106

Half of a circle is blue and a third is red. The other two sections of the circle are equal in size. One of these sections is green; the other is yellow. What fraction of the circle is green?

Problem of the Day • 107

Karin uses $1\frac{1}{4}$ cups of yogurt and $2\frac{3}{4}$ cups each of raspberries and orange juice to make some smoothies. How many total cups of yogurt, fruit, and juice does she use for the smoothies?

Problem of the Day • 108

A small bookcase has a base and two shelves. The base and each shelf is $\frac{3}{8}$ in. thick. The distance from the base to the first shelf is $6\frac{5}{8}$ in. The distance from the first shelf to the top shelf is the same. What is the total height of the bookshelf?

Problem of the Day • 109

A music store receives a shipment of 100 compact disks in a box. Half of the CD's are by one artist. What two decimals show how many CD's are by the artist?

Problem of the Day • 110

A page of stamps has 100 stamps. Al has 3 full pages and a page that is missing 5 stamps. What decimal shows the number of pages of stamps that Al has?

Problem of the Day • 111

Clarissa, Emma, and Beth each took a time test. Their times, in minutes, were: Clarissa—2.01, Emma—1.02, and Beth—1.20. Who had the fastest time?

Problem of the Day • 112

There are 12 large oranges in one bag and 18 small oranges in another bag. In an order of 15 bags of small oranges and 28 bags of large oranges, how many more large oranges are there?

Problem of the Day • 113

Jean buys 2 packs of baseball cards for $2.62 each and 1 bonus pack for $4.29. About how much money does Jean spend?

Problem of the Day • 114

Tina rides her bike 1.3 miles to the library. Then she rides 1.4 miles to Amy's house. How far does Tina ride altogether?

Problem of the Day • 115

Jackie's cactus garden is shaped like a quadrilateral. The measurements of the sides, in meters, are: 2.34, 2.62, 3.05, and 2.16. What is the perimeter of Jackie's garden?

Problem of the Day • 116

Colin walked a total of 8.06 miles one week. The next week he walked a total of 7.5 miles. How many more miles did Colin walk the first week?

Problem of the Day • 117

Candace jogged 3.2 km on Monday, 2.7 km on Wednesday, and 3.5 km on Friday. If she wants to jog a total of 12.5 km this week, how many more kilometers should she jog?